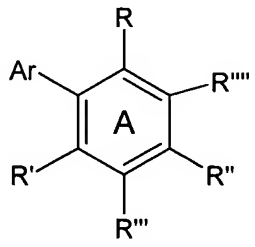
AMENDMENT TO THE CLAIMS

Please amend the claims as follows:

1. (currently amended) A compound of formula I below, and physiologically acceptable salts, comprising:



I

wherein,

the "A" ring atoms of compound formula I comprise carbon and 0 to 2 nitrogen heteroatoms;

Ar is an aromatic ring, an aromatic ring comprising at least one substituent group, a heteroaromatic ring, a heteroaromatic ring comprising 1 to 5 substituent groups, a heterocyclic ring or a heterocyclic ring comprising at least one substituent group;

R ~~comprises~~ is selected from H, OH, OCH_3, alkoxy, OCH_2CH_2OH, alcohol, NH_2, PO_3H, OPO_3H, OSO_3H, halogen, $C(halogen)_3$, SE_1, OE_1 ~~or~~ and NE_1E_2,

E_1 and E_2 are each independently H or alkyl;

R' ~~comprises~~ is selected from ~~H,~~ OH, alkoxy, OCH_2CH_2OH, alcohol, NH_2, PO_3H, OPO_3H, OSO_3H, halogen, $C(halogen)_3$, SE_1, OE_1 ~~or~~ and NE_1E_2,

E_1 and E_2 are each independently H or alkyl;

R''[[,]] ~~R''' and R'''' each independently~~ ~~comprises~~ is $Y\text{-}D_1\text{-}D_2\text{-}T_2$, ~~H, halogen, alkyl, alkoxy or a substituent group,~~

Y is optionally present and if present ~~comprises~~ is selected from O, S, NH, N-alkyl, C=CH, C≡C, CH_2, ~~$CH(CH3)$~~ $CH(CH_3)$, $C(CH_3)_2$, a carbocyclic ring having 4

to 6 ring members ~~or~~ and a heterocyclic ring having 4 to 6 ring members with 1 or 2 heteroatoms,

D_1 is optionally present and if present ~~comprises~~ is alkyl,

D_2 ~~comprises~~ is selected from ~~H,~~ alkyl, NH, N-alkyl, O-alkyl, S-alkyl, a carbocyclic ring, a bicyclic ring, a tricyclic ring, an aromatic ring ~~or~~ and a heteroaromatic ring,

T_2 is optionally present and if present ~~comprises~~ is selected from an aromatic ring, a substituted aromatic ring, a heteroaromatic ring, a substituted heteroaromatic ring, a heterocyclic ring, a substituted heterocyclic ring, H, OH, halogen, ~~or~~ and a substituent group;

R''' and R'''' are each independently selected from H, halogen, alkyl, alkoxy and a substituent group;

with the proviso that,

when Ar is 4-isopropyl pyridine or 4-isopropenyl pyridine, R''' is hydrogen, and R'''' is hydrogen, then R'' can not be a straight or branched saturated alkyl having 1 to 20 carbon atoms;

when Ar is 4-isopropyl toluene or 4-isopropenyl toluene, and both R''' and R'''' are hydrogen, R'' can not be a straight or branched saturated alkyl having 1 to 20 carbon atoms;

when R'' is $C(CH_3)_2(CH_2)_5CH_3$, R_2 and R_4 are methyl, then R' and R'' can not be H, OH or OCH_3.

2. cancelled

3. (currently amended) The compound of claim 1 wherein:

R''' ~~comprises~~ is selected from H, halogen, $C(halogen)_3$, lower alkyl ~~or~~ and alkoxy;

R'''' ~~comprises~~ is selected from H, halogen, $C(halogen)_3$, lower alkyl ~~or~~ and alkoxy; and

R'' ~~comprises~~ is selected from $-Y-D_1-D_2-T_2$,

Y ~~comprises~~ is selected from $C(CH_3)_2$, CH_2 ~~or~~ and $CH(CH_3)$,

D_1 is optionally present and if present ~~comprises~~ is alkyl,

D_2 ~~comprises~~ is selected from ~~H,~~ ~~an~~ alkyl, NH, N-alkyl, O-alkyl, S-alkyl, a carbocyclic ring, a bicyclic ring, a tricyclic ring, an aromatic ring ~~or~~ and a heteroaromatic ring,

T_2 is optionally present and if present ~~comprises~~ is selected from an aromatic ring, a heteroaromatic ring, a heterocyclic ring, H, OH, halogen ~~or~~ and a substituent group.

4. (currently amended) The compound of claim 1 wherein:

R''' ~~comprises~~ is selected from H, halogen, $C(halogen)_3$, lower alkyl ~~or~~ and alkoxy;

R'''' ~~comprises~~ is selected from H, halogen, $C(halogen)_3$, lower alkyl ~~or~~ and alkoxy; and

R'' ~~comprises~~ is $-Y-D_1-D_2-T_2$,

Y ~~comprises~~ is selected from O, NH ~~or~~ and N-alkyl,

D_1 is optionally present and if present ~~comprises~~ is alkyl,

D_2 ~~comprises~~ is selected from ~~H,~~ ~~an~~ alkyl, NH, N-alkyl, O-alkyl, S-alkyl, a carbocyclic ring, a bicyclic ring, a tricyclic ring, an aromatic ring ~~or~~ and a heteroaromatic ring,

T_2 is optionally present and if present ~~comprises~~ is selected from an aromatic ring, a heteroaromatic ring, a heterocyclic ring, H, OH, halogen ~~or~~ and a substituent group.

5. (currently amended) The compound of claim 1 wherein:

R''' ~~comprises~~ is selected from H, halogen, $C(halogen)_3$, lower alkyl ~~or~~ and alkoxy;

R'''' ~~comprises~~ is selected from H, halogen, $C(halogen)_3$, lower alkyl ~~or~~ and alkoxy; and

R'' ~~comprises~~ is $-Y-D_1-D_2-T_2$,

Y is optionally present and if present ~~comprises~~ is selected from C=CH ~~or~~ and C≡C,

D_1 is optionally present and if present ~~comprises~~ is alkyl,

D_2 ~~comprises~~ is selected from ~~H,~~ alkyl, NH, N-alkyl, O-alkyl, S-alkyl, a carbocyclic ring, a bicyclic ring, a tricyclic ring, an aromatic ring ~~or~~ and a heteroaromatic ring,

T_2 is optionally present and if present ~~comprises~~ is selected from an aromatic ring, a heteroaromatic ring, a heterocyclic ring, H, OH, halogen ~~or~~ and a substituent group.

6. (currently amended) The compound of claim 1 wherein:

R''' ~~comprises~~ is selected from H, halogen, $C(halogen)_3$, lower alkyl ~~or~~ and alkoxy;

R'''' ~~comprises~~ is selected from H, halogen, $C(halogen)_3$, lower alkyl ~~or~~ and alkoxy; and

R'' ~~comprises~~ is $-Y-D_1-D_2-T_2$,

Y ~~comprises~~ is optionally present and if present is selected from ~~0 to 1 of~~ a carbocyclic ring having 4 to 6 ring members ~~or~~ and a heterocyclic ring having 4 to 6 ring members with 1 or 2 heteroatoms.

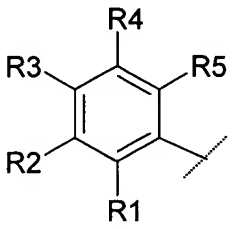
D_1 is optionally present and if present ~~comprises~~ is alkyl,

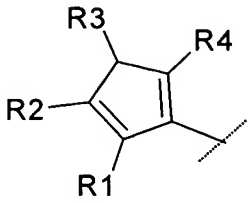
D_2 ~~comprises~~ is selected from ~~H,~~ alkyl, NH, N-alkyl, O-alkyl, S-alkyl, a carbocyclic ring, a bicyclic ring, a tricyclic ring, an aromatic ring ~~or~~ and a heteroaromatic ring,

T_2 is optionally present and if present ~~comprises~~ is selected from an aromatic ring, a heteroaromatic ring, a heterocyclic ring, H, OH, halogen ~~or~~ and a substituent group.

7. (currently amended) The compound of claim 1 wherein Ar ~~comprises~~ is selected from an aromatic ring having 5 or 6 ring members ~~or~~ and a heteroaromatic ring having 5 or 6 ring members.

8. (currently amended) The compound of claim 1 wherein Ar ~~comprises~~ is selected from one of the structures:





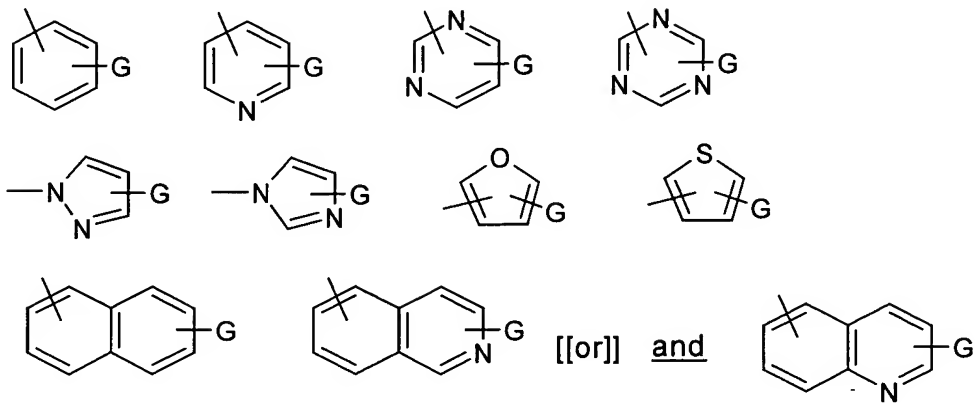
and,

the Ar aromatic ring structure comprises 0 to 3 heteroatoms as ring members;

R1, R2, R3, R4 and R5 are each independently ~~comprise~~ selected from H, OH, NH_2, halogen, N_3, NO_2, NCS, C(halogen)$_3$, CHO, OAc, OCH_3, OC_2H_5, CH_2OH, CH_2CH_2OH, $CH_2CH_2CH_2OH$, CN, $C(=O)CH_3$, COOH, $COOCH_3$, $COOC_2H_5$, $COOCH(CH_3)_2$, $NHCOCH_3$, SCH_3, SC_2H_5, $NHCH_3$, CH_2NH_2, CH_3, C_2H_5, C_3H_7, C_2H_3, ethynyl, alkoxy, alkylmercapto, alkylamino, di-alkylamino, alkylsulfinyl, alkylsulfonyl, ~~or~~ methylene dioxy ~~or~~ and a substituent group.

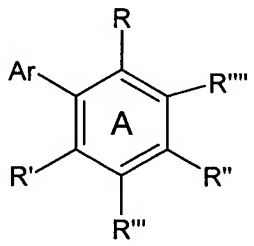
9. (currently amended) The compound of claim 1 wherein Ar ~~comprises~~ is selected from 1-, 2- or 3-pyrrolidinyl, 1-, 2-, 3- or 4-piperidinyl, 1-, 2- or 3-morpholinyl, 1-, 2- or 3-thiomorpholinyl, 1-, 2- or 3- azetidinyl, 1-, or 2-piperazinyl, 2- or 3-tetrahydrofuranyl; or any above group substituted on any available ring carbon thereof by alkyl; or any above group unsubstituted on one or more nitrogen atoms, or any above group substituted on one or more nitrogen atoms independently by an alkyl, benzyl, lower-alkoxybenzyl or benzhydryl group; adamantyl; a carbocyclic ring, a substituted carbocyclic ring, a heteroaromatic ring, a substituted heteroaromatic ring, a heterocyclic ring, a substituted heterocyclic ring, a bicyclic ring, a substituted bicyclic ring, a heterobicyclic ring, a substituted heterobicyclic ring, a polycyclic ring, a substituted polycyclic ring, a heteropolycyclic ring or a substituted heteropolycyclic ring.

10. (currently amended) The compound of claim 1 wherein Ar ~~comprises~~ is selected from:



G ~~comprises~~ is selected from H, OH, NH_2, halogen, N_3, NO_2, NCS, CF_3, CHO, OAc, OCH_3, OC_2H_5, CH_2OH, CH_2CH_2OH, $CH_2CH_2CH_2OH$, CN, $C(=O)CH_3$, COOH, $COOCH_3$, $COOC_2H_5$, $COOCH(CH_3)_2$, $NHCOCH_3$, SCH_3, SC_2H_5, $NHCH_3$, CH_2NH_2, CH_3, C_2H_5, C_3H_7, C_2H_3, ethynyl, alkoxy, alkylmercapto, alkylamino, di-alkylamino, alkylsulfinyl, alkylsulfonyl ~~or~~ and methylene dioxy.

11. (currently amended) A pharmaceutical preparation comprising a therapeutically effective amount of at least one compound of formula I below, and physiologically acceptable salts thereof:



I

wherein,

the "A" ring atoms of compound formula I comprise carbon and 0 to 2 nitrogen heteroatoms;

Ar is an aromatic ring, an aromatic ring comprising at least one substituent group,

a heteroaromatic ring, a heteroaromatic ring comprising 1 to 5 substituent groups, a heterocyclic ring or a heterocyclic ring comprising at least one substituent group;

R ~~comprises~~ is selected from H, OH, OCH_3, alkoxy, OCH_2CH_2OH, alcohol, NH_2, PO_3H, OPO_3H, OSO_3H, halogen, $C(halogen)_3$, SE_1, OE_1 ~~or~~ and NE_1E_2,

E_1 and E_2 are each independently H or alkyl;

R' ~~comprises~~ is selected from ~~H,~~ OH, alkoxy, OCH_2CH_2OH, alcohol, NH_2, PO_3H, OPO_3H, OSO_3H, halogen, $C(halogen)_3$, SE_1, OE_1 ~~or~~ and NE_1E_2,

E_1 and E_2 are each independently H or alkyl;

R"[[,]] ~~R''' and R'''' each independently comprises~~ is $Y\text{-}D_1\text{-}D_2\text{-}T_2$, ~~H, halogen, alkyl, alkoxy or a substituent group,~~

Y is optionally present and if present ~~comprises~~ is selected from O, S, NH, N-alkyl, C=CH, C≡C, CH_2, CH(CH3), $C(CH_3)_2$, a carbocyclic ring having 4 to 6 ring members ~~or~~ and a heterocyclic ring having 4 to 6 ring members with 1 or 2 heteroatoms,

D_1 is optionally present and if present ~~comprises~~ is alkyl,

D_2 ~~comprises~~ is selected from ~~H,~~ alkyl, NH, N-alkyl, O-alkyl, S-alkyl, a carbocyclic ring, a bicyclic ring, a tricyclic ring, an aromatic ring ~~or~~ and a heteroaromatic ring,

T_2 is optionally present and if present ~~comprises~~ is selected from an aromatic ring, a substituted aromatic ring, a heteroaromatic ring, a substituted heteroaromatic ring, a heterocyclic ring, a substituted heterocyclic ring, H, OH, halogen, ~~or~~ and a substituent group;

R''' and R'''' are each independently selected from H, halogen, alkyl, alkoxy and a substituent group;

with the proviso that,

when Ar is 4-isopropyl pyridine or 4-isopropenyl pyridine, R''' is hydrogen, and R'''' is hydrogen, then R'' can not be a straight or branched saturated alkyl having 1 to 20 carbon atoms;

when Ar is 4-isopropyl toluene or 4-isopropenyl toluene, and both R''' and R'''' are hydrogen, R'' can not be a straight or branched saturated alkyl having 1 to 20 carbon atoms;

when R'' is $C(CH_3)_2(CH_2)_5CH_3$, R_2 and R_4 are methyl, then R' and R'' can not be H, OH or OCH_3.

12. cancelled

13. (currently amended) The pharmaceutical preparation of claim 11, wherein:

R''' ~~comprises~~ is selected from H, halogen, $C(halogen)_3$, lower alkyl ~~or~~ and alkoxy;

R'''' ~~comprises~~ is selected from H, halogen, $C(halogen)_3$, lower alkyl ~~or~~ and alkoxy; and

R'' ~~comprises~~ is $-Y-D_1-D_2-T_2$,

~~Y comprises~~ Y is optionally present and if present ~~comprises~~ is selected from O, S, NH, N-alkyl, C=CH, C≡C, CH_2, ~~CH(CH3)~~ $CH(CH_3)$, $C(CH_3)_2$, a carbocyclic ring having 4 to 6 ring members ~~or~~ and a heterocyclic ring having 4 to 6 ring members with 1 or 2 heteroatoms,

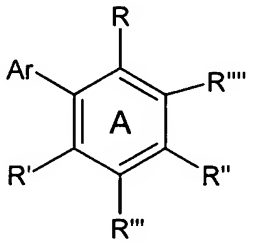
D_1 is optionally present and if present ~~comprises~~ is alkyl,

D_2 ~~comprises~~ is selected from ~~H,~~ ~~an~~ alkyl, NH, N-alkyl, O-alkyl, S-alkyl, a carbocyclic ring, a bicyclic ring, a tricyclic ring, an aromatic ring ~~or~~ and a heteroaromatic ring,

T_2 is optionally present and if present ~~comprises~~ is selected from an aromatic ring, a heteroaromatic ring, a heterocyclic ring, H, OH, halogen ~~or~~ and a substituent group.

14. (currently amended) A method of stimulating a cannabinoid receptor in an

individual or animal comprising administering to the individual or animal a therapeutically effective amount of ~~a therapeutically effective amount~~ of at least one compound of formula I below, and physiologically acceptable salts thereof:



I

wherein,

the "A" ring atoms of compound formula I comprise carbon and 0 to 2 nitrogen heteroatoms;

Ar is an aromatic ring, an aromatic ring comprising at least one substituent group, a heteroaromatic ring, a heteroaromatic ring comprising 1 to 5 substituent groups, a heterocyclic ring or a heterocyclic ring comprising at least one substituent group;

R ~~comprises~~ is selected from H, OH, OCH_3, alkoxy, OCH_2CH_2OH, alcohol, NH_2, PO_3H, OPO_3H, OSO_3H, halogen, $C(halogen)_3$, SE_1, OE_1 ~~or~~ and NE_1E_2,

E_1 and E_2 are each independently H or alkyl;

R' ~~comprises~~ is selected from ~~H,~~ OH, alkoxy, OCH_2CH_2OH, alcohol, NH_2, PO_3H, OPO_3H, OSO_3H, halogen, $C(halogen)_3$, SE_1, OE_1 ~~or~~ and NE_1E_2,

E_1 and E_2 are each independently H or alkyl;

R''[[,]] ~~R''' and R'''' each independently~~ ~~comprises~~ is $Y\text{-}D_1\text{-}D_2\text{-}T_2$, ~~H, halogen, alkyl, alkoxy or a substituent group,~~

Y is optionally present and if present ~~comprises~~ is selected from O, S, NH, N-alkyl, C=CH, C≡C, CH_2, ~~CH(CH3)~~ $CH(CH_3)$, $C(CH_3)_2$, a carbocyclic ring having 4 to 6 ring members ~~or~~ and a heterocyclic ring having 4 to 6 ring members with 1 or 2 heteroatoms,

D_1 is optionally present and if present ~~comprises~~ is alkyl,

D_2 ~~comprises~~ is selected from ~~H,~~ alkyl, NH, N-alkyl, O-alkyl, S-alkyl, a carbocyclic ring, a bicyclic ring, a tricyclic ring, an aromatic ring ~~or~~ and a heteroaromatic ring,

T_2 is optionally present and if present ~~comprises~~ is selected from an aromatic ring, a substituted aromatic ring, a heteroaromatic ring, a substituted heteroaromatic ring, a heterocyclic ring, a substituted heterocyclic ring, H, OH, halogen, ~~or~~ and a substituent group;

R''' and R'''' are each independently selected from H, halogen, alkyl, alkoxy and a substituent group;

with the proviso that,

when Ar is 4-isopropyl pyridine or 4-isopropenyl pyridine, R''' is hydrogen, and R'''' is hydrogen, then R'' can not be a straight or branched saturated alkyl having 1 to 20 carbon atoms;

when Ar is 4-isopropyl toluene or 4-isopropenyl toluene, and both R''' and R'''' are hydrogen, R'' can not be a straight or branched saturated alkyl having 1 to 20 carbon atoms;

when R'' is $C(CH_3)_2(CH_2)_5CH_3$, R_2 and R_4 are methyl, then R' and R'' can not be H, OH or OCH_3.

15. (currently amended) The method of claim 14 wherein:

R''' ~~comprises~~ is selected from H, halogen, $C(halogen)_3$, lower alkyl ~~or~~ and alkoxy;

R'''' ~~comprises~~ is selected from H, halogen, $C(halogen)_3$, lower alkyl ~~or~~ and alkoxy; and

R'' ~~comprises~~ is $-Y-D_1-D_2-T_2$,

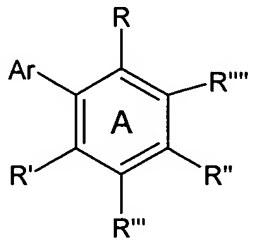
~~Y comprises~~ Y is optionally present and if present ~~comprises~~ is selected from O, S, NH, N-alkyl, C=CH, C≡C, CH_2, ~~CH(CH3)~~ $CH(CH_3)$, $C(CH_3)_2$, a carbocyclic ring having 4 to 6 ring members ~~or~~ and a heterocyclic ring having 4 to 6 ring members with 1 or 2 heteroatoms,

D_1 is optionally present and if present ~~comprises~~ is alkyl,

D_2 ~~comprises~~ is selected from ~~H,~~ ~~an~~ alkyl, NH, N-alkyl, O-alkyl, S-alkyl, a carbocyclic ring, a bicyclic ring, a tricyclic ring, an aromatic ring ~~or~~ and a heteroaromatic ring,

T_2 is optionally present and if present ~~comprises~~ is selected from an aromatic ring, a heteroaromatic ring, a heterocyclic ring, H, OH, halogen ~~or~~ and a substituent group.

16. (currently amended) A method of selectively stimulating CB2 cannabinoid receptors in an individual or animal comprising administering to the individual or animal a therapeutically effective amount of at least one compound of formula I below, and physiologically acceptable salts thereof:



I

wherein,

the "A" ring atoms of compound formula I comprise carbon and 0 to 2 nitrogen heteroatoms;

Ar is an aromatic ring, an aromatic ring comprising at least one substituent group, a heteroaromatic ring, a heteroaromatic ring comprising 1 to 5 substituent groups, a heterocyclic ring or a heterocyclic ring comprising at least one substituent group;

R ~~comprises~~ is selected from H, OH, OCH_3, alkoxy, OCH_2CH_2OH, alcohol, NH_2, PO_3H, OPO_3H, OSO_3H, halogen, $C(halogen)_3$, SE_1, OE_1 ~~or~~ and NE_1E_2,

E_1 and E_2 are each independently H or alkyl;

R' ~~comprises~~ is selected from ~~H,~~ OH, alkoxy, OCH_2CH_2OH, alcohol, NH_2, PO_3H,

OPO_3H, OSO_3H, halogen, $C(halogen)_3$, SE_1, OE_1 ~~or~~ and NE_1E_2,

E_1 and E_2 are each independently H or alkyl;

R"[[,]] ~~R''' and R'''' each independently comprises~~ is $Y\text{-}D_1\text{-}D_2\text{-}T_2$, ~~H, halogen, alkyl, alkoxy or a substituent group,~~

Y is optionally present and if present ~~comprises~~ is selected from O, S, NH, N-alkyl, C=CH, C≡C, CH_2, ~~CH(CH3)~~ $CH(CH_3)$, $C(CH_3)_2$, a carbocyclic ring having 4 to 6 ring members ~~or~~ and a heterocyclic ring having 4 to 6 ring members with 1 or 2 heteroatoms,

D_1 is optionally present and if present ~~comprises~~ is alkyl,

D_2 ~~comprises~~ is selected from ~~H,~~ alkyl, NH, N-alkyl, O-alkyl, S-alkyl, a carbocyclic ring, a bicyclic ring, a tricyclic ring, an aromatic ring ~~or~~ and a heteroaromatic ring,

T_2 is optionally present and if present ~~comprises~~ is selected from an aromatic ring, a substituted aromatic ring, a heteroaromatic ring, a substituted heteroaromatic ring, a heterocyclic ring, a substituted heterocyclic ring, H, OH, halogen, ~~or~~ and a substituent group;

R''' and R'''' are each independently selected from H, halogen, alkyl, alkoxy and a substituent group;

with the proviso that,

when Ar is 4-isopropyl pyridine or 4-isopropenyl pyridine, R''' is hydrogen, and R'''' is hydrogen, then R" can not be a straight or branched saturated alkyl having 1 to 20 carbon atoms;

when Ar is 4-isopropyl toluene or 4-isopropenyl toluene, and both R''' and R'''' are hydrogen, R" can not be a straight or branched saturated alkyl having 1 to 20 carbon atoms;

when R" is $C(CH_3)_2(CH_2)_5CH_3$, R_2 and R_4 are methyl, then R' and R" can not be H, OH or OCH_3.

17. (currently amended) The method of claim 16, wherein:

R''' ~~comprises~~ is selected from H, halogen, $C(halogen)_3$, lower alkyl ~~or~~ and alkoxy;

R'''' ~~comprises~~ is selected from H, halogen, $C(halogen)_3$, lower alkyl ~~or~~ and alkoxy; and

R'' ~~comprises~~ is $-Y-D_1-D_2-T_2$,

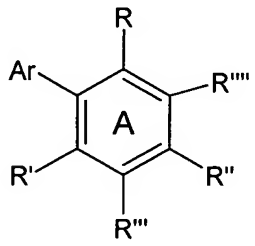
~~Y comprises~~ Y is optionally present and if present ~~comprises~~ is selected from O, S, NH, N-alkyl, C=CH, C≡C, CH_2, ~~CH(CH3)~~ $CH(CH_3)$, $C(CH_3)_2$, a carbocyclic ring having 4 to 6 ring members ~~or~~ and a heterocyclic ring having 4 to 6 ring members with 1 or 2 heteroatoms,

D_1 is optionally present and if present ~~comprises~~ is alkyl,

D_2 ~~comprises~~ is selected from ~~H,~~ ~~an~~ alkyl, NH, N-alkyl, O-alkyl, S-alkyl, a carbocyclic ring, a bicyclic ring, a tricyclic ring, an aromatic ring ~~or~~ and a heteroaromatic ring,

T_2 is optionally present and if present ~~comprises~~ is selected from an aromatic ring, a heteroaromatic ring, a heterocyclic ring, H, OH, halogen ~~or~~ and a substituent group.

18. (currently amended) A method of treating a condition comprising administering to an individual or animal having the condition a therapeutically effective amount of at least one compound of formula I below, and physiologically acceptable salts thereof:



I

wherein,

the "A" ring atoms of compound formula I comprise carbon and 0 to 2 nitrogen heteroatoms;

Ar is an aromatic ring, an aromatic ring comprising at least one substituent group,

a heteroaromatic ring, a heteroaromatic ring comprising 1 to 5 substituent groups, a heterocyclic ring or a heterocyclic ring comprising at least one substituent group;

R ~~comprises~~ is selected from H, OH, OCH_3, alkoxy, OCH_2CH_2OH, alcohol, NH_2, PO_3H, OPO_3H, OSO_3H, halogen, $C(halogen)_3$, SE_1, OE_1 ~~or~~ and NE_1E_2,

E_1 and E_2 are each independently H or alkyl;

R' ~~comprises~~ is selected from ~~H,~~ OH, alkoxy, OCH_2CH_2OH, alcohol, NH_2, PO_3H, OPO_3H, OSO_3H, halogen, $C(halogen)_3$, SE_1, OE_1 ~~or~~ and NE_1E_2,

E_1 and E_2 are each independently H or alkyl;

R"[[,]] ~~R''' and R'''' each independently~~ ~~comprises~~ is $Y\text{-}D_1\text{-}D_2\text{-}T_2$, ~~H, halogen, alkyl, alkoxy or a substituent group,~~

Y is optionally present and if present ~~comprises~~ is selected from O, S, NH, N-alkyl, C=CH, C≡C, CH_2, ~~CH(CH3)~~ $CH(CH_3)$, $C(CH_3)_2$, a carbocyclic ring having 4 to 6 ring members ~~or~~ and a heterocyclic ring having 4 to 6 ring members with 1 or 2 heteroatoms,

D_1 is optionally present and if present ~~comprises~~ is alkyl,

D_2 ~~comprises~~ is selected from ~~H,~~ alkyl, NH, N-alkyl, O-alkyl, S-alkyl, a carbocyclic ring, a bicyclic ring, a tricyclic ring, an aromatic ring ~~or~~ and a heteroaromatic ring,

T_2 is optionally present and if present ~~comprises~~ is selected from an aromatic ring, a substituted aromatic ring, a heteroaromatic ring, a substituted heteroaromatic ring, a heterocyclic ring, a substituted heterocyclic ring, H, OH, halogen, ~~or~~ and a substituent group;

R''' and R'''' are each independently selected from H, halogen, alkyl, alkoxy and a substituent group,

with the proviso that,

when Ar is 4-isopropyl pyridine or 4-isopropenyl pyridine, R''' is hydrogen, and R'''' is hydrogen, then R'' can not be a straight or branched saturated alkyl having 1 to 20 carbon atoms;

when Ar is 4-isopropyl toluene or 4-isopropenyl toluene, and both R''' and R'''' are hydrogen, R'' can not be a straight or branched saturated alkyl having 1 to 20 carbon atoms;

when R'' is $C(CH_3)_2(CH_2)_5CH_3$, R_2 and R_4 are methyl, then R' and R'' can not be H, OH or OCH_3.

19. (currently amended) The method of claim 18, wherein:

R''' ~~comprises~~ is selected from H, halogen, $C(halogen)_3$, lower alkyl ~~or~~ and alkoxy;

R'''' ~~comprises~~ is selected from H, halogen, $C(halogen)_3$, lower alkyl ~~or~~ and alkoxy; and

R'' ~~comprises~~ is $-Y-D_1-D_2-T_2$,

~~Y comprises~~ Y is optionally present and if present ~~comprises~~ is selected from O, S, NH, N-alkyl, C=CH, C≡C, CH_2, ~~CH(CH3)~~ $CH(CH_3)$, $C(CH_3)_2$, a carbocyclic ring having 4 to 6 ring members ~~or~~ and a heterocyclic ring having 4 to 6 ring members with 1 or 2 heteroatoms,

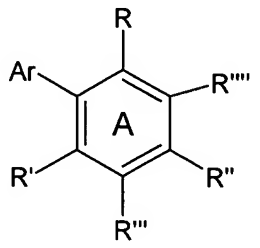
D_1 is optionally present and if present ~~comprises~~ is alkyl,

D_2 ~~comprises~~ is selected from ~~H,~~ ~~an~~ alkyl, NH, N-alkyl, O-alkyl, S-alkyl, a carbocyclic ring, a bicyclic ring, a tricyclic ring, an aromatic ring ~~or~~ and a heteroaromatic ring,

T_2 is optionally present and if present ~~comprises~~ is selected from an aromatic ring, a heteroaromatic ring, a heterocyclic ring, H, OH, halogen ~~or~~ and a substituent group.

20. (currently amended) A method of providing a physiological response in an individual or animal comprising administering to the individual or animal a therapeutically effective amount of at least one compound of formula I below, and

physiologically acceptable salts thereof:



I

wherein,

the "A" ring atoms of compound formula I comprise carbon and 0 to 2 nitrogen heteroatoms;

Ar is an aromatic ring, an aromatic ring comprising at least one substituent group, a heteroaromatic ring, a heteroaromatic ring comprising 1 to 5 substituent groups, a heterocyclic ring or a heterocyclic ring comprising at least one substituent group;

R ~~comprises~~ is selected from H, OH, OCH_3, alkoxy, OCH_2CH_2OH, alcohol, NH_2, PO_3H, OPO_3H, OSO_3H, halogen, $C(halogen)_3$, SE_1, OE_1 ~~or~~ and NE_1E_2,

E_1 and E_2 are each independently H or alkyl;

R' ~~comprises~~ is selected from ~~H,~~ OH, alkoxy, OCH_2CH_2OH, alcohol, NH_2, PO_3H, OPO_3H, OSO_3H, halogen, $C(halogen)_3$, SE_1, OE_1 ~~or~~ and NE_1E_2,

E_1 and E_2 are each independently H or alkyl;

R''[[,]] ~~R''' and R'''' each independently~~ ~~comprises~~ is $Y\text{-}D_1\text{-}D_2\text{-}T_2$, ~~H, halogen, alkyl, alkoxy or a substituent group,~~

Y is optionally present and if present ~~comprises~~ is selected from O, S, NH, N-alkyl, C=CH, C≡C, CH_2, ~~CH(CH3)~~ $CH(CH_3)$, $C(CH_3)_2$, a carbocyclic ring having 4 to 6 ring members ~~or~~ and a heterocyclic ring having 4 to 6 ring members with 1 or 2 heteroatoms,

D_1 is optionally present and if present ~~comprises~~ is alkyl,

D_2 ~~comprises~~ is selected from ~~H,~~ alkyl, NH, N-alkyl, O-alkyl, S-alkyl, a carbocyclic

ring, a bicyclic ring, a tricyclic ring, an aromatic ring ~~or~~ and a heteroaromatic ring,

T_2 is optionally present and if present ~~comprises~~ is selected from an aromatic ring, a substituted aromatic ring, a heteroaromatic ring, a substituted heteroaromatic ring, a heterocyclic ring, a substituted heterocyclic ring, H, OH, halogen, ~~or~~ and a substituent group;

R''' and R'''' are each independently selected from H, halogen, alkyl, alkoxy and a substituent group,

with the proviso that,

when Ar is 4-isopropyl pyridine or 4-isopropenyl pyridine, R''' is hydrogen, and R'''' is hydrogen, then R'' can not be a straight or branched saturated alkyl having 1 to 20 carbon atoms;

when Ar is 4-isopropyl toluene or 4-isopropenyl toluene, and both R''' and R'''' are hydrogen, R'' can not be a straight or branched saturated alkyl having 1 to 20 carbon atoms;

when R'' is $C(CH_3)_2(CH_2)_5CH_3$, R_2 and R_4 are methyl, then R' and R'' can not be H, OH or OCH_3.

21. (currently amended) The method of claim 20, wherein:

R''' ~~comprises~~ is selected from H, halogen, $C(halogen)_3$, lower alkyl ~~or~~ and alkoxy;

R'''' ~~comprises~~ is selected from H, halogen, $C(halogen)_3$, lower alkyl ~~or~~ and alkoxy; and

R'' ~~comprises~~ is -Y-D_1-D_2-T_2,

~~Y comprises~~ Y is optionally present and if present ~~comprises~~ is selected from O, S, NH, N-alkyl, C=CH, C≡C, CH_2, ~~CH(CH3)~~ $CH(CH_3)$, $C(CH_3)_2$, a carbocyclic ring having 4 to 6 ring members ~~or~~ and a heterocyclic ring having 4 to 6 ring members with 1 or 2 heteroatoms,

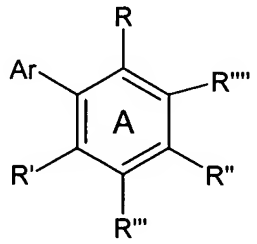
D_1 is optionally present and if present ~~comprises~~ is alkyl,

D_2 ~~comprises~~ is selected from ~~H,~~ ~~an~~ alkyl, NH, N-alkyl, O-alkyl, S-alkyl, a carbocyclic ring, a bicyclic ring, a tricyclic ring, an aromatic ring ~~or~~ and a

heteroaromatic ring,

T_2 is optionally present and if present ~~comprises~~ is selected from an aromatic ring, a heteroaromatic ring, a heterocyclic ring, H, OH, halogen ~~or~~ and a substituent group.

22. (currently amended) A method of treating a condition selected from central and peripheral pain, neuropathy, neurodegenerative diseases including multiple sclerosis, Parkinson's disease, Huntington's chorea, Alzheimer's disease; mental disorders such as schizophrenia and depression, endotoxic shock, hypotensive shock; or of modulating appetite; or of modulating the immune system; or of reducing fertility; or of treating diseases associated with motor function such as Tourette's syndrome; or of treating inflammation; or of providing neuroprotection; or of suppressing memory; or of producing peripheral vasodilation; or of treating epilepsy, glaucoma, nausea associated with cancer chemotherapy or nausea associated with Aids wasting syndrome comprising administering to an individual or animal having the condition a therapeutically effective amount of at least one compound ~~at least one compound~~ of formula I below, and physiologically acceptable salts thereof:



I

wherein,

the "A" ring atoms of compound formula I comprise carbon and 0 to 2 nitrogen heteroatoms;

Ar is an aromatic ring, an aromatic ring comprising at least one substituent group, a heteroaromatic ring, a heteroaromatic ring comprising 1 to 5 substituent groups, a heterocyclic ring or a heterocyclic ring comprising at least one substituent group;

R ~~comprises~~ is selected from H, OH, OCH_3, alkoxy, OCH_2CH_2OH, alcohol, NH_2,

PO_3H, OPO_3H, OSO_3H, halogen, $C(halogen)_3$, SE_1, OE_1 ~~or~~ and NE_1E_2,

E_1 and E_2 are each independently H or alkyl;

R' ~~comprises~~ is selected from ~~H,~~ OH, alkoxy, OCH_2CH_2OH, alcohol, NH_2, PO_3H, OPO_3H, OSO_3H, halogen, $C(halogen)_3$, SE_1, OE_1 ~~or~~ and NE_1E_2,

E_1 and E_2 are each independently H or alkyl;

R"[[,]] ~~R''' and R'''' each independently~~ ~~comprises~~ is $Y\text{-}D_1\text{-}D_2\text{-}T_2$, ~~H, halogen, alkyl, alkoxy or a substituent group,~~

Y is optionally present and if present ~~comprises~~ is selected from O, S, NH, N-alkyl, C=CH, C≡C, CH_2, ~~CH(CH3)~~ $CH(CH_3)$, $C(CH_3)_2$, a carbocyclic ring having 4 to 6 ring members ~~or~~ and a heterocyclic ring having 4 to 6 ring members with 1 or 2 heteroatoms,

D_1 is optionally present and if present ~~comprises~~ is alkyl,

D_2 ~~comprises~~ is selected from ~~H,~~ alkyl, NH, N-alkyl, O-alkyl, S-alkyl, a carbocyclic ring, a bicyclic ring, a tricyclic ring, an aromatic ring ~~or~~ and a heteroaromatic ring,

T_2 is optionally present and if present ~~comprises~~ is selected from an aromatic ring, a substituted aromatic ring, a heteroaromatic ring, a substituted heteroaromatic ring, a heterocyclic ring, a substituted heterocyclic ring, H, OH, halogen, ~~or~~ and a substituent group;

R''' and R'''' are each independently selected from H, halogen, alkyl, alkoxy and a substituent group,

with the proviso that,

when Ar is 4-isopropyl pyridine or 4-isopropenyl pyridine, R''' is hydrogen, and R'''' is hydrogen, then R" can not be a straight or branched saturated alkyl having 1 to 20 carbon atoms;

when Ar is 4-isopropyl toluene or 4-isopropenyl toluene, and both R''' and R'''' are hydrogen, R" can not be a straight or branched saturated alkyl having 1 to 20 carbon atoms;

when R" is $C(CH_3)_2(CH_2)_5CH_3$, R_2 and R_4 are methyl, then R' and R" can not be H, OH or OCH_3.

23. (currently amended) The method of claim 22, wherein:

R"' ~~comprises~~ is selected from H, halogen, $C(halogen)_3$, lower alkyl ~~or~~ and alkoxy;

R"" ~~comprises~~ is selected from H, halogen, $C(halogen)_3$, lower alkyl ~~or~~ and alkoxy; and

R" ~~comprises~~ is $-Y-D_1-D_2-T_2$,

~~Y comprises~~ Y is optionally present and if present ~~comprises~~ is selected from O, S, NH, N-alkyl, C=CH, C≡C, CH_2, ~~CH(CH3)~~ $CH(CH_3)$, $C(CH_3)_2$, a carbocyclic ring having 4 to 6 ring members ~~or~~ and a heterocyclic ring having 4 to 6 ring members with 1 or 2 heteroatoms,

D_1 is optionally present and if present ~~comprises~~ is alkyl,

D_2 ~~comprises~~ is selected from ~~H,~~ ~~an~~ alkyl, NH, N-alkyl, O-alkyl, S-alkyl, a carbocyclic ring, a bicyclic ring, a tricyclic ring, an aromatic ring ~~or~~ and a heteroaromatic ring,

T_2 is optionally present and if present ~~comprises~~ is selected from an aromatic ring, a heteroaromatic ring, a heterocyclic ring, H, OH, halogen ~~or~~ and a substituent group.